U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Report No. 82-26

Docket No. 50-247

License No. DPR-26 Priority _____ Category C

Licensee: Consolidated Edison Company of New York, Inc.
P. O. Box 215
Buchanan, New York 10511

Facility Name: Indian Point #2

Inspection At: Buchanan New York

Inspection Conducted: November 17 - 19, 1982

Inspectors: Richard H. Harris for Harry W. Kerch 12/30/82
Harry W. Kerch, Mechanical Engineer (NDE) date

Richard H. Harris 12/30/82
Richard Harris, Inspector date

Approved by: Lee H. Bettenhausen for 12/30/82
J. P. Durr, Chief, Materials and Processes Section date

Inspection Summary:

Areas Inspected: Special, announced, inspection of nondestructive examinations associated with steam generator upper shell to transitions cone weld cracks. The inspection involved 34 inspector hours onsite by two regional-based inspectors.

Results: No violations were identified.

Details

1. Persons Contacted

Consolidated Edison Company of New York, Inc. (Con Ed)

M. Blatt, DRA,
R. Backus, ANI, Hartford
A. Corvese, QA,
E. Dadson, QA,
J. Denane, QA,
J. Makepeace, Tech. Consultant,
J. Schwartz,
P. Skatte, ME,
G. Wasilenko, QA Manager,

2. Ultrasonic Examination of Steam Generator's Upper Shell to Transition Cone Girth Welds

A potentially generic problem was reported by the licensee of Indian Point 3 wherein extensive cracking and, in one case, a through wall leak were identified in the upper shell to transition cone weld of the steam generators. Licensees with similar steam generators were notified of this condition in IE Information Notice 82-37. The purpose of this inspection was to confirm that similar cracking was not present in the Indian Point 2 steam generators through a review of licensee data and NRC independent measurements using ultrasonic testing techniques.

The inspector reviewed the Inservice Inspection (ISI) ultrasonic examination data for the four steam generators' upper shell to transition cone girth welds and additional ultrasonic television tapes of the visual examination of the internal surfaces of the steam generator welds.

Steam generator number 22 was selected by the inspector for re-ultrasonic examination. Areas of weld 22-6 were selected with and without known indications. These areas were re-ultrasonically examined in accordance with NRC procedures and American Society of Mechanical Engineers (ASME) Section XI requirements. The NRC independent measurements confirmed the licensee's findings that the welds are acceptable.

No violations were identified.

3. Inservice Inspection (ISI) Reports

Weld 22-6 ISI Report indicated that approximately 70% of the volume was not examined in the ultrasonic direction position number 5. The reason stated on the report was that the insulation ring was 8" above weld and prevented inspection. The NRC requested justification for the inability to inspect using a 45^0 shear wave, "1 x 1" transducer for material of this thickness. Other ISI reports for weld 6 had similar statements that approximately 30% of weld volume was not examined. It is unclear what 30%

and, if the surface condition was not suitable for ISI base line, it should have been prepared. Also, the use of low angle ultrasonic inspections for ASME (ISI) Section XI needs justification with a qualified procedure and method of calibration. The ultrasonic test reports were preliminary and required final acceptance by the licensee. These items are unresolved, pending licensee review and acceptance and NRC review (247/82-26-01).

4. Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable, violations, or deviations. An unresolved item is discussed in paragraph 3.

5. Exit Interview

The inspectors met with members of the licensee's staff on November 19, 1982. The inspectors summarized the purpose, the scope of the inspection, and the findings.